

ABSTRACT

Disclosed is an image sensor consisting of light sensor circuits arranged to form an array of pixels, each of which produces in a photoelectric converting element a sensor current proportional to the quantity of light falling thereon and converts the sensor current into a voltage signal by a MOS type transistor with a logarithmic output characteristic in a weak inverse state, wherein a means for changing over a drain voltage of the transistor for each light sensor circuit to a value lower than a normal value for a specified time to remove a charge accumulated in a parasitic capacity of the photoelectric converting element to initialize the circuit before detecting a light signal. The image sensor can obtain a voltage signal corresponding to the quantity of incident light even if the sensor current was rapidly changed, thereby eliminating the possibility of occurrence of afterglow of each pixel even at a small quantity of incident light.